

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested. Upon entry of this amendment, the specification is amended, claims 1, 2, 4, 6, 7, 9, and 10 are amended, and claim 8 is cancelled, leaving claims 1-7 and 9-12 pending with claim 1 being independent. No new matter has been added.

Notice of References Cited

Applicants respectfully submit that in the Notice of references cited, the Yoshiki reference is incorrectly cited as JP 2003-015467. The correct publication number of the Yoshiki reference is JP 03-015467, which issued on January 23, 1991. Accordingly, Applicants respectfully request that the Examiner issue a corrected Notice of References Cited.

Substitute Specification

The specification and abstract have been carefully reviewed and revised to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application. No new matter has been added.

Claim Objections

Claims 9 and 10 have been objected to because of various informalities. Specifically, the Examiner states that claims 9 and 10 recite "coloring agent holding suction" and should read "coloring agent holding section."

Claims 9 and 10 have been amended to overcome this objection.

Rejections Under 35 U.S.C. §103(a)

Claims 1-3 and 8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Becerra et al. (U.S. 2004/0072049) in view of King (U.S. 3,317,283).

Applicants submit that the claims as now pending are allowable over the cited prior art.

In particular, amended independent claim 1 recites a liquid fuel container comprising a coloring agent, which is placed in at least part of the outer peripheral portion of a liquid fuel holding section and part of the outer peripheral portion of a product holding section, the coloring agent configured to change the color of the liquid fuel when the coloring agent comes into contact with liquid fuel leaked from the liquid fuel holding section and change the color of the water when the coloring agent comes in contact with water leaked from the product holding section, the color of the changed liquid fuel being different from the color of the changed water.

Both a liquid fuel, such as methanol, and a product, such as water, exist inside a fuel cell system. When liquid leaks from a container in the system, it is important to identify the type of liquid that has leaked from the container (i.e., whether the liquid is liquid fuel or water). Identifying the type of leaked liquid is necessary for taking the appropriate measures, since the anti-leakage measures are different between methanol that has inflammability and toxicity, and water that is neither inflammable nor toxic. *See* Page 31, lines 11-16 in the original specification.

To ensure the proper identification of the leaked liquid, claim 1 includes the following elements:

- i) a coloring agent configured to change the color of the leaked liquid from the container by reacting with the leaked liquid;
- ii) the coloring agent is configured to react with both liquid fuel and water to change color; and
- iii) the changed color of the liquid fuel differs from the changed color of the water.

A coloring agent which reacts only with fuel liquid cannot detect leakage of water, and a color agent which changes the color of fuel liquid and water to the same color cannot identify which liquid has leaked. However, according to the liquid fuel container as defined in amended claim 1, it is possible to identify which liquid is leaking, the liquid fuel or water.

Applicants submit that the cited prior art fails to disclose or render obvious such a device. In particular, Becerra discloses a the fuel cell system that comprises a fuel bladder 1305a, which the Examiner suggests corresponds to the liquid fuel holding section recited in claim 1, and an effluent bladder 1306b, which the Examiner suggests corresponds to the product holding section recited in claim 1. *See* Fig. 13 in Becerra. Furthermore, Becerra discloses that

the fuel substance may be mixed with one or more additives that increase its detectability in the event that the fuel substance escapes from the container. The additives include a color component, and are stored and maintained separately from the fuel. *See* paragraphs [0011] and [0012] of Becerra.

Additionally, King discloses that a dye soluble in organic liquid should be added to the outside of a tank holding organic liquid so that a color change can be viewed from the outside if liquid leaks and mixes with the dye. *See* column 1 of King.

However, Applicants submit that both Becerra and King disclose detecting only that a liquid has leaked. That is, neither Becerra nor King discloses identifying the type of liquid that has leaked.

The Examiner suggests that Becerra discloses that "the leakage of the liquid fuel or water will be detected by a difference in the change of color of the coloring additive (paragraph 0011)." However, Applicants respectfully disagree and submit that Becerra only discloses that the additives include odor and/or color components in order to increase its detectability. *See* paragraph [0011]. Therefore, Applicants submit that Becerra fails to disclose i) a coloring agent configured to change the color of the leaked liquid from the container by reacting with the leaked liquid; ii) that the coloring agent is configured to react with both liquid fuel and water to change color; and iii) that the changed color of the liquid fuel differs from the changed color of the water, as recited in claim 1 of the present application.

Additionally, there is no reasoning in the prior art to modify Becerra and/or King such that the combination thereof would have rendered claim 1 obvious. Therefore, Applicants submit that claim 1 and its dependent claims are allowable over the cited prior art.

Claims 4, 9 and 12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Becerra in view of King as applied to claims 1-3 and 8 above, and further in view of Yoshiki et al. (JP 03-015467).

Claim 5 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Becerra in view of King as applied to claims 1-3 and 8 above, and further in view of Hsu (U.S. 2003/0097762).

Claims 6 and 7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Becerra in view of King and Yoshiki as applied to claim 4, and further in view of Cornell (U.S. 4,079,729).

Claim 10 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Becerra in view of King and Yoshiki as applied to claim 4 above, and further in view of Ebbeson (U.S. 4,416,617).

Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Becerra.

Applicants submit that since each of these claims is dependent from independent claim 1 and since none of the additionally cited references overcomes the deficiencies of the combination of Becerra and King, each of these claims is allowable for the reasons set forth above.

Conclusion

In view of the foregoing amendments and remarks, all of the claims now pending in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be allowed, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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